



ACE17446B

N-Channel Enhancement Mode Field Effect Transistor

Description

The ACE17446B uses advanced trench technology to provide excellent $R_{DS(ON)}$ and low gate charge. This device is suitable for use as a load switch or in PWM applications. The source leads are separated to allow a kelvin connection to the source, which may be used to bypass the source inductance.

ACE17446BPD and ACE17446BNN are electrically identical.

-RoHS Compliant

-Halogen Free

Features

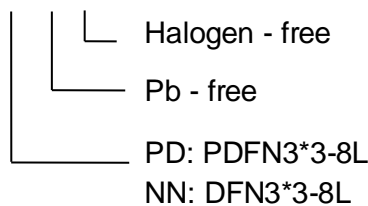
- V_{DS} (V) = 30V
- V_{GS} (V) = ± 20 V
- I_D = 45A (V_{GS} = 10V)
- $R_{DS(ON)}$ < 6.5m Ω (V_{GS} = 10V)
- $R_{DS(ON)}$ < 10m Ω (V_{GS} = 4.5V)

Absolute Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Max	Unit	
Drain-Source Voltage	V_{DSS}	30	V	
Gate-Source Voltage	V_{GSS}	± 20	V	
Drain Current (Continuous)*AC	I_D	$T_A=25^\circ\text{C}$	45	A
		$T_A=70^\circ\text{C}$	36	
Drain Current (Pulsed)*B	I_{DM}	140	A	
Power Dissipation	P_D	$T_A=25^\circ\text{C}$	25	W
		$T_A=70^\circ\text{C}$	9	
Operating temperature / Storage temperature	T_J/T_{STG}	-55~150	$^\circ\text{C}$	

Ordering information

ACE17446B XX + H





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Notes

ACE does not assume any responsibility for use as critical components in life support devices or systems without the express written approval of the president and general counsel of ACE Technology Co., LTD. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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